

# Refine Search

## Search Results -

Terms	Documents
darbepoetin alfa	4953

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## Search History

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<u>L11</u>	darbepoetin	4	<u>L11</u>
<u>L10</u>	L9 and l6	615	<u>L10</u>
<u>L9</u>	L8 and l7	1153	<u>L9</u>
<u>L8</u>	EPO and (glycosylation site)	6601	<u>L8</u>
<u>L7</u>	EPO and PEG	1434	<u>L7</u>
<u>L6</u>	EPO and conjugate	1845	<u>L6</u>
<u>L5</u>	L4 and (RhuEPo)	1	<u>L5</u>
<u>L4</u>	6284260.pn.	1	<u>L4</u>
<u>L3</u>	L2 and EPO	1	<u>L3</u>
<u>L2</u>	Zaharia.in.	29	<u>L2</u>
<u>L1</u>	5951996.pn.	1	<u>L1</u>

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# Refine Search

## Search Results -

Terms	Documents
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## Search History

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<u>L13</u>	L12 and l11	4	<u>L13</u>
<u>L12</u>	darbepoetin alfa	4953	<u>L12</u>
<u>L11</u>	darbepoetin	4	<u>L11</u>
<u>L10</u>	L9 and l6	615	<u>L10</u>
<u>L9</u>	L8 and l7	1153	<u>L9</u>
<u>L8</u>	EPO and (glycosylation site)	6601	<u>L8</u>
<u>L7</u>	EPO and PEG	1434	<u>L7</u>
<u>L6</u>	EPO and conjugate	1845	<u>L6</u>
<u>L5</u>	L4 and (RhuEPo)	1	<u>L5</u>
<u>L4</u>	6284260.pn.	1	<u>L4</u>
<u>L3</u>	L2 and EPO	1	<u>L3</u>
<u>L2</u>	Zaharia.in.	29	<u>L2</u>
<u>L1</u>	5951996.pn.	1	<u>L1</u>

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1: [Craig KJ, Williams JD, Riley SG, Smith H, Owens DR, Worthing D, Cavill I, Phillips AO.](#) [Related Articles](#), [Links](#)

 **Anemia and diabetes in the absence of nephropathy.**

*Diabetes Care.* 2005 May;28(5):1118-23.

PMID: 15855576 [PubMed - indexed for MEDLINE]

2: [Biesenbach G, Schmekal B, Eichbauer-Sturm G, Janko O.](#) [Related Articles](#), [Links](#)

 **Erythropoietin requirement in patients with type 2 diabetes mellitus on maintenance hemodialysis therapy.**

*Wien Klin Wochenschr.* 2004 Dec 30;116(24):844-8.

PMID: 15690969 [PubMed - indexed for MEDLINE]

3: [Spallone V, Maiello MR, Kurukulasuriya N, Barini A, Lovecchio M, Tartaglione R, Mennuni G, Menzinger G.](#) [Related Articles](#), [Links](#)

 **Does autonomic neuropathy play a role in erythropoietin regulation in non-proteinuric Type 2 diabetic patients?**

*Diabet Med.* 2004 Nov;21(11):1174-80.

PMID: 15498082 [PubMed - indexed for MEDLINE]

4: [Stefanovic V, Antic S.](#) [Related Articles](#), [Links](#)

 **Plasma cell membrane glycoprotein 1 (PC-1): a marker of insulin resistance in obesity, uremia and diabetes mellitus.**

*Clin Lab.* 2004;50(5-6):271-8. Review.

PMID: 15209435 [PubMed - indexed for MEDLINE]

5: [Pernod G, Bosson JL, Golshayan D, Barro C, Alloatti S, Ture-Baron C, Quarello F, Jeantet A, Von Albertini B, Foret M, Lauren G, Cordonnier D, Piccoli G, Wauters JP, Diamant Alpin Collaborative Dialysis Study Group.](#) [Related Articles](#), [Links](#)

 **The Diamant Alpin Dialysis cohort study: clinico-biological characteristics and cardiovascular genetic risk profile of incident patients.**

*J Nephrol.* 2004 Jan-Feb;17(1):66-75.

PMID: 15151261 [PubMed - indexed for MEDLINE]

6: [Lin CL, Hsu PY, Yang HY, Huang CC.](#) [Related Articles](#), [Links](#)

 **Low dose intravenous ascorbic acid for erythropoietin-hyporesponsive anemia in diabetic hemodialysis patients with iron overload.**

*Ren Fail.* 2003 May;25(3):445-53.

PMID: 12803508 [PubMed - indexed for MEDLINE]

7: [Stefanovic V, Nesic V, Stojimirovic B.](#) [Related Articles](#), [Links](#)

 **Treatment of insulin resistance in uremia.**

*Int J Artif Organs.* 2003 Feb;26(2):100-4. Review.

PMID: 12653342 [PubMed - indexed for MEDLINE]

8: [Silverberg DS, Wexler D, Blum M, Tchelbiner JZ, Sheps D, Keren G, Schwartz D, Baruch R, Yachnin T, Shaked M, Schwartz I, Steinbruch S, Iaina A.](#) [Related Articles](#), [Links](#)

 **The effect of correction of anaemia in diabetics and non-diabetics with severe resistant congestive heart failure and chronic renal failure by subcutaneous**

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erythropoietin and intravenous iron.

Nephrol Dial Transplant. 2003 Jan;18(1):141-6.

PMID: 12480972 [PubMed - indexed for MEDLINE]

9: [Ritz E.](#)

[Related Articles](#), [Links](#)

 [Advances in nephrology: successes and lessons learnt from diabetes mellitus.](#)

Nephrol Dial Transplant. 2001;16 Suppl 7:46-50. Review.

PMID: 11590257 [PubMed - indexed for MEDLINE]

10: [Nowicki M, Kokot F, Kokot M, Bar A, Dulawa J.](#)

[Related Articles](#), [Links](#)

 [Renal clearance of endogenous erythropoietin in patients with proteinuria.](#)

Int Urol Nephrol. 1994;26(6):691-9.

PMID: 7759206 [PubMed - indexed for MEDLINE]

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Feb 24 2006 04:49:50



US-PAT-NO: 6908902  
 DOCUMENT-IDENTIFIER: US 6908902 B2

TITLE: Treatment of neurological dysfunction comprising fructopyranose sulfamates and erythropoietin

DATE-ISSUED: June 21, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Plata-Salaman; Carlos	Ambler	PA		
Smith-Swintosky; Virginia	Hatfield	PA		

US-CL-CURRENT: 514/23; 514/12, 514/451, 514/453, 514/454

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Claims](#) | [KOMC](#) | [Draw Desc](#) | [Ima](#)

4. Document ID: US 6818613 B2

L11: Entry 4 of 4

File: USPT

Nov 16, 2004

US-PAT-NO: 6818613  
 DOCUMENT-IDENTIFIER: US 6818613 B2

TITLE: Aqueous sustained-release formulations of proteins

DATE-ISSUED: November 16, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Sharma; Basant	Bridgewater	NJ		
Jin; Renzhe	Bridgewater	NJ		
Rudolph; Sunitha	Doylestown	PA		
Cheung; Wing K.	Warren	NJ		
Begum; Selima	Edison	NJ		
Kelley; Marian	Annandale	NJ		

US-CL-CURRENT: 514/8

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Claims](#) | [KOMC](#) | [Draw Desc](#) | [Ima](#)

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Terms	Documents
darbepoetin	4

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$\epsilon$ -amino group of Lys20 to poly(ethylene glycol) group(s) (PEG), preferably to alkoxy poly(ethylene glycol) group(s), more preferably to lower methoxypoly(ethylene glycol) group(s). The muteins of this invention have the same uses as EPO. In particular, the muteins of this invention are useful to treat patients by stimulating the division and differentiation of committed erythroid progenitors in the bone marrow. The present invention also includes a method for the treatment of anemia in humans and the use of the muteins for the manufacturing of a pharmaceutical agent preferably for such treatment. The present invention also includes a method for preparing erythropoietin muteins according to the invention, which comprises the production of a glycosylated EPO fragment consisting of the amino acids 26-165-(EPO 26-165) and subsequent fusion of said fragment with a nonglycosylated but preferably PEGylated EPO fragment consisting of the amino acids 1-28 (EPO 1-28).

IT 510776-46-2DP, muteins 510776-47-3DP, muteins  
 RL: BPN (Biosynthetic preparation); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(amino acid sequence; preparation of PEGylated and diglycosylated erythropoietin with improved pharmaceutical properties in induction of erythropoiesis)

RN 510776-46-2 HCPLUS

CN Erythropoietin (human 165-amino acid isoform) (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 510776-47-3 HCPLUS

CN Erythropoietin (human 166-amino acid isoform) (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT 510776-48-4, 29-165-erythropoietin (human)

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (amino acid sequence; preparation of PEGylated and diglycosylated erythropoietin with improved pharmaceutical properties in induction of erythropoiesis)

RN 510776-48-4 HCPLUS

CN 29-165-erythropoietin (human) (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT 11096-26-7DP, Erythropoietin, muteins

RL: BPN (Biosynthetic preparation); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of PEGylated and diglycosylated erythropoietin with improved pharmaceutical properties in induction of erythropoiesis)

RN 11096-26-7 HCPLUS

CN Erythropoietin (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L108 ANSWER 7 OF 27 HCPLUS COPYRIGHT 2005 ACS on STN

AN 2002:869575 HCPLUS

DN 137:346941

TI Method for improving the quality of life of patients by administration of erythropoietin (RhuEPO)

IN Zaharia, Veronica C.

PA USA

SO U.S. Pat. Appl. Publ., 4 pp., Cont.-in-part of U.S. Ser. No. 872,630.

600 " print

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002169129	A1	20021114	US 2002-133545	20020426 <--
	US 5951996	A	19990914	US 1998-18815	19980204 <--
	US 6274158	B1	20010814	US 1999-335076	19990617 <--
	US 6521245	B1	20030218	US 2001-872630	20010601 <--
PRAI	US 1998-18815	A2	19980204	<--	
	US 1998-91598P	P	19980702	<--	
	US 1999-125253P	P	19990319	<--	
	US 1999-335076	A3	19990617	<--	
	US 2001-287206P	P	20010428	<--	
	US 2001-872630	A2	20010601	<--	
AB	A method for providing various benefits with the administration of different quantities of Erythropoietin. The method provides for enhancing the quality of life by administration of Erythropoietin before a substantial increase in Hb occurs. The improvement in quality of life is independent of the hemopoietic effect. In larger quantities the administration of RhuEPO leads to repair of vascular damage and leads to the redistribution of the iron trapped in storage organs, from where it cannot be used for red blood cell production, into the hemopoietic system leading to enhanced red blood cell production				
IT	11096-26-7, Erythropoietin RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (method for improving the quality of life of patients by administration of erythropoietin (RhuEPO))				
RN	11096-26-7 HCPLUS				
CN	Erythropoietin (9CI) (CA INDEX NAME)				
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***					
IT	7439-89-6, Iron, biological studies RL: BSU (Biological study, unclassified); BIOL (Biological study) (method for limiting chronic blood loss by administering RhuEPO to prevent iron loss and to increase Hb level, increased mean corpuscular Hb, and increased red blood cell hemoglobinization.)				
RN	7439-89-6 HCPLUS				
CN	Iron (7CI, 8CI, 9CI) (CA INDEX NAME)				

Fe

L108 ANSWER 8 OF 27 HCPLUS COPYRIGHT 2005 ACS on STN

AN 2002:785122 HCPLUS

DN 138:298038

TI Long-term reversal of chronic anemia using a hypoxia-regulated erythropoietin gene therapy

AU Binley, Katie; Askham, Zoe; Iqball, Sharifah; Spearman, Hayley; Martin, Leigh; de Alwis, Mahesh; Thrasher, Adrian J.; Ali, Robin R.; Maxwell, Patrick H.; Kingsman, Susan; Naylor, Stuart

CS Oxford BioMedica (UK) Ltd, London, OX4 4GA, UK

SO Blood (2002), 100(7), 2406-2413

CODEN: BLOOAW; ISSN: 0006-4971

PB American Society of Hematology

DT Journal  
 LA English  
 AB Anemia is a common clin. problem, and there is much interest in its role in promoting left ventricular hypertrophy through increasing cardiac workload. Normally, red blood cell production is adjusted through the regulation of erythropoietin (Epo) production by the kidney. One important cause of anemia is relative deficiency of Epo, which occurs in most types of renal disease. Clin., this can be corrected by supplementation with recombinant Epo. Here the authors describe an oxygen-regulated gene therapy approach to treating homozygous erythropoietin-SV40 T antigen (Epo-TAgh) mice with relative erythropoietin deficiency. The authors used vectors in which murine Epo expression was directed by an Oxford Biomedica hypoxia response element (OBHRE) or a constitutive cytomegalovirus (CMV) promoter. Both corrected anemia, but CMV-Epo -treated mice acquired fatal polycythemia. In contrast, OBHRE-Epo corrected the hematocrit level in anemic mice to a normal physiol. level that stabilized without resulting in polycythemia. Importantly, the OBHRE-Epo vector had no significant effect on the hematocrit of control mice. Homozygous Epo-TAgh mice display cardiac hypertrophy, a common adaptive response in patients with chronic anemia. In the OBHRE-Epo-treated Epo-TAgh mice, the authors observed a significant reversal of cardiac hypertrophy. The authors conclude that the OBHRE promoter gives rise to physiol. regulated Epo secretion such that the hematocrit level is corrected to healthy in anemic Epo-TAgh mice. This establishes that a hypoxia regulatory mechanism similar to the natural mechanism can be achieved, and it makes EPO gene therapy more attractive and safer in clin. settings. The authors envisage that this control system will allow regulated delivery of therapeutic gene products in other ischemic settings.  
 IT 7439-89-6, Iron, biological studies  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
     (long-term reversal of chronic anemia using hypoxia-regulated erythropoietin gene therapy)  
 RN 7439-89-6 HCPLUS  
 CN Iron (7CI, 8CI, 9CI) (CA INDEX NAME)

## Fe

IT 11096-26-7, Erythropoietin  
 RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
     (long-term reversal of chronic anemia using hypoxia-regulated erythropoietin gene therapy)  
 RN 11096-26-7 HCPLUS  
 CN Erythropoietin (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

## RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Anon	1989	2	20	Lancet	
Bachmann, S	1993	41	335	J Histochem Cytochem	HCPLUS
Bartholomew, A	2001	12	1527	Hum Gene Ther	HCPLUS
Beall, C	2000	7	534	Gene Ther	HCPLUS
Binley, K	1999	6	1721	Gene Ther	HCPLUS
Boast, K	1999	10	2197	Hum Gene Ther	HCPLUS

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002169129	A1	20021114	US 2002-133545	20020426 <--
	US 5951996	A	19990914	US 1998-18815	19980204 <--
	US 6274158	B1	20010814	US 1999-335076	19990617 <--
	US 6521245	B1	20030218	US 2001-872630	20010601 <--
PRAI	US 1998-18815	A2	19980204	<--	
	US 1998-91598P	P	19980702	<--	
	US 1999-125253P	P	19990319	<--	
	US 1999-335076	A3	19990617	<--	
	US 2001-287206P	P	20010428	<--	
	US 2001-872630	A2	20010601	<--	
AB	A method for providing various benefits with the administration of different quantities of Erythropoietin. The method provides for enhancing the quality of life by administration of Erythropoietin before a substantial increase in Hb occurs. The improvement in quality of life is independent of the hemopoietic effect. In larger quantities the administration of RhuEPO leads to repair of vascular damage and leads to the redistribution of the iron trapped in storage organs, from where it cannot be used for red blood cell production, into the hemopoietic system leading to enhanced red blood cell production				
IT	11096-26-7, Erythropoietin RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (method for improving the quality of life of patients by administration of erythropoietin (RhuEPO))				
RN	11096-26-7 HCPLUS				
CN	Erythropoietin (9CI) (CA INDEX NAME)				
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IT	7439-89-6, Iron, biological studies RL: BSU (Biological study, unclassified); BIOL (Biological study) (method for limiting chronic blood loss by administering RhuEPO to prevent iron loss and to increase Hb level, increased mean corpuscular Hb, and increased red blood cell hemoglobinization.)				
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CN	Iron (7CI, 8CI, 9CI) (CA INDEX NAME)				

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L108 ANSWER 8 OF 27 HCPLUS COPYRIGHT 2005 ACS on STN

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TI Long-term reversal of chronic anemia using a hypoxia-regulated erythropoietin gene therapy

AU Binley, Katie; Askham, Zoe; Iqball, Sharifah; Spearman, Hayley; Martin, Leigh; de Alwis, Mahesh; Thrasher, Adrian J.; Ali, Robin R.; Maxwell, Patrick H.; Kingsman, Susan; Naylor, Stuart

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